

## REMARKS

### Status of the Claims

Claims 2, 4, 6, 10-65, 70 and 73-74 are canceled without prejudice or disclaimer. Claims 1, 3, 5, 7-9, 66-69 and 71 are amended. Claims 1, 3, 5, 7-12, 66-69 and 71-72 are in the case.

### Amendments to the Specification

Paragraph [0036] has been amended to insert the Sequence Identification numbers for the nucleic acid and protein sequences mentioned in the paragraph and disclosed in the SEQUENCE LISTING.

No new matter is added by this amendment.

### Support for the Amendments to the Claims

Support for the amendments to the claims are found throughout the specification and drawings, particularly in FIG. 8, and in the specification as follows.

Support for methods of screening for breast cancer is found at least in paragraphs [0005] and [0052] and in the drawings, as in FIG. 8 for example. Support for the step of obtaining cells from the subject is found at least in paragraph [0013], which states that a sample can comprise cells obtained from a subject, including cells obtained from breast or ovarian tissue, and can be obtained from other tissues, cells or fluids.

The Specification provides support for an assay in which cancer is detected by a significant increase in level of FLJ20174 at least in paragraph [0072]. As used in the art, and as based on the Specification, a person of skill in the art of cancer screening would understand that a significant increase indicates a statistically significant increase using any of the standard statistical methods known in the art.

Support for comparing the level of nucleic acids in a subject sample and a control sample is found at least in FIG. 8, and in paragraphs [0012], [0041], [0090] and [0091]. Paragraph [0012] states for example, that the methods include comparing the expression of FLJ20174 in a sample from the subject with the expression of FLJ20174 from one or more non-cancerous tissues, either from the same type of tissue as the sample or from a different type of tissue, and can be from the same or different subjects. The control samples can thus be obtained from one or more subjects that are unrelated to the subject sample, and can be taken at a different location or at a different time than the sample taken from the subject.

Support for the amendments to claim 9 is found at least in [0057], which describes the probes and/or primers that can be used in the claimed methods. The complement to the disclosed sequences is well understood in the art to be the nucleotide sequence that consists of the Watson-Crick base pairing complements running in the opposite 5'-3' orientation. The use of complementary sequences is supported at least in [0078].

The newly added claims are fully supported in the Specification and are drawn primarily to methods of detecting nucleotide sequences that are well known and routine in the art. Specific support is found in paragraphs [0052] through [0057], which describe assays including Southern (DNA to DNA) analyses, Northern (DNA to RNA) analyses, single stranded conformational polymorphism analyses, PCR and RT-PCR, the use of complementary sequences for binding, use of nucleic acids immobilized on a solid support such as a membrane, a microtiter plate or a polystyrene bead, and in situ assays, including fluorescent in situ hybridization assays. Further support can be found in paragraph [0078], which describes probes that can be labeled or non-labeled and fixed to a substrate, or can be pairs of PCR primers, molecular beacon probes, and the like.

### Summary of Interview

A telephone interview was held on October 9, 2007, with Examiners Peter J. Reddig and Susan N. Ungar, and Applicants' representative Tim Corder. Applicant's representative sincerely appreciates the courtesy and professionalism of both Examiners during this interview.

All of the pending claims and the rejections of record were discussed. It was agreed by all parties that Applicants would submit the amendments as listed above, placing the claims in condition for allowance.

## CONCLUSION

Applicants believe that the claims are in condition for allowance. Such favorable action is respectfully requested. If the Examiner has any questions or comments regarding any issue associated with this application a telephone call to the undersigned representative at 512.542.8446 or to Tracey Davies at 512.542.8619 is welcome.

Respectfully submitted,

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